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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)
STARCORE01

Certificate of Transmission under 37 CFR 1.8	Application Number	Filed
I hereby certify that this correspondence is being _____ facsimile transmitted or ___X___ e-filed to the United States Patent and Trademark Office - Mail Stop AF.	10/675,640	09-30-2003
	First Named Inventor	
on July 20, 2007	Gil Navch	
	Art Unit	Examiner
Signature /Dora Hudgins/ Typed or printed name: Dora Hudgins	2181	Vincent Lai

Applicant request review of the final rejection in the above identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☐ attorney or agent of record.
Registration number:

☒ attorney or agent acting under 37 CFR 1.34
Registration number if acting under 37 CFR 1.34 47,093

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Signature

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Telephone number

July 20, 2007
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☒ *Total of 1 forms are submitted

REMARKS

STATUS

In a Final Office Action mailed on February 21, 2007, the Examiner rejected claims 43-56 under 35 U.S.C. § 101 as being non-statutory subject matter. The Examiner further rejected claims 1-3, 6-10, 12-17, 20-24, 26-31, 34-38, 40-45, 48-52, and 54-56 under 35 U.S.C. § 102(b) as being anticipated by Verbauwhede et al. (U.S. Pat. No. 5,710,914).

CLEAR ERROR IN THE REJECTION OF CLAIMS 43-56 UNDER 35 U.S.C. § 101

Applicants respectfully submit that there is "clear error" in the Examiner's rejection of claims 43-56 under 35 U.S.C. § 101 because the Examiner has failed to establish a prima facie case of unpatentability. The Examiner bears the initial burden of presenting a case of unpatentability under 35 U.S.C. § 101. (*See* M.P.E.P. § 2106(IV)(D)). Applicants understand that the Examiner is denying the patentability of claims 43-56, since these claims recite a computer program product comprising apparatus from which a computer program is accessible by an information handling system, where the apparatus includes a network connection. This conclusory statement by the Examiner, however, does not rise to the level of presenting a case of unpatentability under 35 U.S.C. § 101, as required by M.P.E.P. § 2106(IV)(D)). In the Final Office Action mailed on February 21, 2007, the Examiner once again states that "a network connection is a non-statutory computer readable medium apparatus." (*See* Final Office Action, page , paragraph 3). The Examiner, however, provides no basis other than his conclusory comments to support his statement. Indeed, from a technological standpoint a network connection transferring a computer program is similar to a computer-readable memory loaded with the computer program in that the computer is able to execute the computer program transferred from the network connection or loaded from a memory. A computer memory with a stored program is as tangible as a network connection transporting the program. Thus, for this additional reason, Applicants respectfully submit that claim 43 is directed to statutory subject matter.

In addition, Applicants respectfully submit that in evaluating whether claims 43 is directed to statutory subject matter, the Examiner must consider claim 43 as a whole. Indeed, the Federal Circuit has stated that "the dispositive inquiry is whether the claim as a whole is directed to statutory subject matter, it is irrelevant that a claim may contain, as part of the whole,

subject matter which would not be patentable by itself." *In re Alappat*, 33 F.3d 1526, 1543 (Fed. Cir. 1994). Thus, just because as part of the whole, claim 43, recites computer readable medium, including a network connection, does not make claim 43 un-statutory. Accordingly, at least for these reasons, Applicants respectfully submit that claim 43 is directed to statutory subject matter.

Claims 44-56 depend, directly or indirectly, upon claim 43 and thus are patentable for at least the reason given above with respect to claim 43. In conclusion, for all of the reasons given above, Applicants respectfully request the panel to withdraw the rejection of claims 43-56 under 35 U.S.C. § 101.

CLEAR ERROR IN THE REJECTION OF 1-3, 6-10, 12-17, 20-24, 26-31, 34-38, 40-45, 48-52, AND 54-56 UNDER 35 U.S.C. § 102(b)

Applicants respectfully submit that there is "clear error" in the Examiner's rejection of claims 1-3, 6-10, 12-17, 20-24, 26-31, 34-38, 40-45, 48-52, and 54-56 under 35 U.S.C. § 102(b) as being anticipated by Verbauwhede because the cited reference does not teach each and every claimed limitation. Taking claim 1 as being exemplary, Verbauwhede does not teach "executing the first instruction during both of its first and second execution states, in which a first arithmetic operation of the first instruction is performed in response to first source operand information, and in which first destination operand information is output in response thereto … and executing the second instruction during a selected one of its first and second execution stages, in which a second arithmetic operation of the second instruction is performed in response to second source operand information, … so that the second instruction is executed: during only its first execution stage in response to the second source operand information being independent of the first destination operand information; and during only its second execution stage in response to the second source operand information being dependent on the first destination operand information … ," as recited in claim 1. In particular, claim 1 requires that the second instruction be executed during a selected one of the first and second execution stages depending on whether the second source operand information is independent of the first destination operand information or not. Verbauwhede has no teachings related to this aspect of the claimed subject matter. Instead, Verbauwhede teaches a conventional instruction pipeline that has only one execute stage. (*See* FIG. 4; col. 6, l. 65 to col. 7, l. 10). Only during this execute stage any arithmetic operations on operands are performed. The Examiner believes that the "Read" stage of Verbauwhede is

equivalent to one of the execution stages recited in claim 1. Applicants respectfully disagree. No arithmetic operation is performed during the "Read" stage of Verbauwhede. As explained in Verbauwhede: "[d]uring the Read cycle, data is read from one or two locations within data memory 6." There is no teaching whatsoever of an arithmetic operation being performed during the "Read" stage of Verbauwhede. Thus, the "Read" stage of Verbauwhede cannot be equated to an execution stage, as claimed.

Moreover, as explained above, claim 1 requires that the second instruction be executed during a selected one of the first and second execution stages depending on whether the second source operand information is independent of the first destination operand information or not. Verbauwhede has no teachings whatsoever related to this subject matter. As explained above, since Verbauwhede teaches only one execution stage, no selection between two execution stages is (or can be) taught by Verbauwhede. The Examiner points to col. 10, lines 42-60 of Verbauwhede to conclude that Verbauwhede teaches this limitation. The cited portion of Verbauwhede, however, merely teaches the notion of a data hazard that can occur during execution of instructions by the pipeline described in Verbauwhede. In particular, in the Verbauwhede pipeline the read cycle of instruction i+1 occurs after the write cycle of instruction i. So, in case instruction i+1 was programmed to read the result of instruction i, then instruction i+1 may read incorrect data. This is because instruction i+1 would read a memory location that does not have the result of instruction i yet. In sum, instruction i+1 would end up reading wrong data. Verbauwhede, however, does not teach that the second instruction be executed during a selected one of the first and second execution stages depending on whether the second source operand information is independent of the first destination operand information or not. Instead, Verbauwhede teaches that "the programmer should avoid storing in program memory 4 a sequence of instructions that would give rise to such a hazard." (col. 11, ll. 59-60).

Indeed, the Examiner notes in the Final Office Action that the instructions in Verbauwhede "follow a pipeline and thus cannot skip a stage in a pipeline." (*See* Final Office Action, page 6, last sentence of first paragraph). Thus, an instruction in Verbauwhede cannot be executed during a selected one of the first and second execution stages depending on whether the second source operand information is independent of the first destination operand information or not since that would be tantamount to skipping a stage in the pipeline. Contrary to the teachings of Verbauwhede, Applicants teach the skipping of stages in a pipeline. (*See* Specification, FIG. 7, which shows stages in the pipeline being skipped). Thus, Applicants respectfully submit that

Verbauwhede fails to teach "executing the first instruction during both of its first and second execution states, in which a first arithmetic operation of the first instruction is performed in response to first source operand information, and in which first destination operand information is output in response thereto … and executing the second instruction during a selected one of its first and second execution stages, in which a second arithmetic operation of the second instruction is performed in response to second source operand information, … so that the second instruction is executed: during only its first execution stage in response to the second source operand information being independent of the first destination operand information; and during only its second execution stage in response to the second source operand information being dependent on the first destination operand information," as recited in claim 1.

Accordingly, because Verbauwhede does not teach each and every limitation of claim 1, claim 1 is patentable over the cited reference.

Claims 2, 3, 6-10, and 12-14 depend, directly or indirectly, upon claim 1 and thus are patentable for at least the reasons given above with respect to claim 1.

Applicants respectfully submit that claim 15 is patentable for similar reasons as given above with respect to claim 1, because Verbauwhede does not teach assembling the first instruction for execution during both of its first and second execution stages, in which a first arithmetic operation of the first instruction is to be performed in response to first source operand information, and in which first destination operand information is to be output in response thereto; and assembling the second instruction for execution during a selected one of its first and second execution stages, in which a second arithmetic operation of the second instruction is to be performed in response to second source operand information, … so that the second instruction is to be executed: during only its first execution stage in response to the second source operand information being independent of the first destination operand information; and during only its second execution stage in response to the second source operand being dependent on the first destination operand information, as recited in claim 15.

Claims 16, 17, 20-24, and 26-28 depend, directly or indirectly, upon claim 15 and thus are patentable for at least the same reasons as given above concerning claim 15.

Applicants respectfully submit that claim 29 is patentable for similar reasons as given above with respect to claim 1, because Verbauwhede does not teach first circuitry and second circuitry for performing the method recited in claim 1.

Claims 30, 31, 34-38, and 40-43 depend, directly or indirectly, upon claim 29 and thus are patentable for at least the same reasons as given above concerning claim 29.

Applicants respectfully submit that claim 43 is patentable for similar reasons given above with respect to claim 1, because Verbauwhede does not teach a computer program product comprising a computer program for causing an information system to assemble, including assembling the first instruction for execution during both of its first and second execution stages, in which a first arithmetic operation of the first instruction is to be performed in response to first source operand information, and in which first destination operand information is to be output in response thereto; and assembling the second instruction for execution during a selected one of its first and second execution stages, in which a second arithmetic operation of the second instruction is to be performed in response to second source operand information, ... so that the second instruction is to be executed: during only its first execution stage in response to the second source operand information being independent of the first destination operand information; and during only its second execution stage in response to the second source operand being dependent on the first destination operand information, as recited in claim 43.

Claims 44, 45, 48-52, and 54-56 depend, directly or indirectly, upon claim 43 and thus are patentable for at least the same reasons as given above concerning claim 43.

Accordingly, Applicants respectfully request the panel to: (1) withdraw the rejection of claims 43-56 under 35 U.S.C. § 101; and (2) withdraw the rejection of pending claims 1-3, 6-10, 12-17, 20-24, 26-31, 34-38, 40-45, 48-52, and 54-56 under 35 U.S.C. § 102(b) as being anticipated by Verbauwhede.

Should issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the Applicants' representative at (512) 996-6839. If Applicants have overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 503079.